ART. XX.—Contributions to the Flora of Australia, No. 22.1

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Read 12th November, 1914].

Anagallis arvensis, L. "Pimpernel." (Primulaceae).

Recently responsible for the death of 23 cage birds at an aviary in Mentone. The birds were given a few handfuls of chickweed, containing Pimpernel. Next morning 23 out of about 100 birds were dead.

Anthistiria imberbis, Retz (1779-91), (A. australis, R. Br., 1810), (A. Forskalli, Kunth., 1835), (Themeda Forskalli, Hackel, 1885). (Gramineae). "Common Kangaroo Grass."

A native to Australia, South Africa, and Asia. This perennial grass is given under A. ciliata, L. in Bentham's Flora Australiensis, but Linnaeus' species is an annual Indian plant. It has also been termed A. vulgaris by Häckel in Engler's Pflanzen Familien, 11. Teil. 2. Abt. p. 29, 1887, but the oldest name has priority. The plant has had five different scientific names in 100 years, but the popular name has remained constant during the same period.

Antirrhinum Orontium, L. "Lesser Snapdragon." (Scrophulariaceae).

Ballarat. W. H. Bacchus; Camberwell, C. French (jnr.). October, 1913.

Previously recorded as a garden escape, but now appears to maintain itself when wild, and may be considered as naturalised. It is a native of Europe, Asia and Africa.

ARTEMISIA VULGARIS, L. "Mugwort." (Compositae).

Coode Island, Victoria. J. R. Tovey and C. French (jnr.). March, 1912.

Apparently in process of naturalisation. It is a native of N. Temperate regions.

^{1.} No. 21 in Proc. Roy. Soc. Victoria, vol. xxvi. (n.s.), p. 152, 1913.

ASTER SUBULATUS, Michx. "Shrub Aster." (Compositae).

Otukai, New Zealand. H. Carse, April, 1914.

A native of North America, widely spread as a naturalised alien in Victoria and New South Wales, but has not been hithertorecorded as growing wild in New Zealand.

Atropis magellanica of Atropis stricta? (Hook). Desv. (Gramineae).

Germantown, near Geelong, Victoria, H. B. Williamson, November, 1910.

This grass is a native of the southern part of South America, has only recently appeared, and is apparently sufficiently established to be considered naturalised, at least near Germantown. In regard to it Professor Hitchcock writes:—"The species of this genus are in great confusion, and it is difficult to identify them with certainty, until the group has been monographed. The three nerved upper glume of A. magellanica is unusual." This species has at different times been placed under Catabrosa, and also under Glyceria. The grass appears as though it would be of some value as a pasture plant, but nothing definite appears to be known from this point of view in regard to it. It has no injurious properties so far as is known at present.

Dr. Stapf writes:—"The spikelets agree very well with those of a specimen of Glyceria stricta, collected by Adamson, near Melbourne, in 1856, and fairly well with those of Hooker's type of Glyceria stricta from New Zealand, except that the joints of the rhacilla are generally longer, and the spikelets therefore laxer; but we have no samples with panicles equally loose. I wonder whether it can be a shade form. This could only be decided in the field or by experiment. Meanwhile the grass might be marked as Glyceria (Atropis) stricta, f. perlaxa."

Professor Hackel considers it to be Atropis stricta, Hack, var. tenuispica, Hack, ined (Glyceria tenuispica Steud.), a species found in Australia and New Zealand.

The position of this grass is for the present uncertain.

AVENA BARBATA, Brot. "Barbed Oat Grass" (Gramineae).

Government Domain, Melbourne. Edwin Cheel, 9/1/1913.

A native of Arabia, Asia Minor, and the Mediterranean Regions, not yet sufficiently established to be considered naturalised.

Caladenia congesta, R. Br. "Slender Caladenia." (Orchidaćeae).

Mt. Difficult, Grampians. J. W. Audas, 30/10/13.

The specimens have bronze to purple flowers. Bentham gives the flowers as 1-2 and pink. Luxuriant specimens also occur with pale or purplish perianths, and they may have up to three or four flowers.

CENTUNCULUS MINIMUS, L. "Chaff Weed" (Primulaceae).

This tiny plant is not recorded in Bentham's Flora Australiensis, and in Baron von Mueller's Census is recorded as Australian. In the Key to Victorian Plants, it is given with the native plants, but with the proviso, "possibly immigrated." The plant was first collected in 1883 at Mt. Macedon as Anagallis centunculus, and since then has been found as Hawkesdale (1899, F. M. Reader and H. B. Williamson, and at Mentone, C. R. Roberts, 1910). It is possibly more widely spread, but overlooked on account of its small size. There can be no doubt that it is a naturalised alien in Victoria, and not an original member of the native flora. In Engler's Pflanzenreich (Primulaceae, 1905), it is recorded from Europe, Asia, Africa, North and South America, but not from Australia.

Conringia orientalis, Donu. "Hare's Ear." (Cruciferae).

Warracknabeal, Borung Shire, Oct., 1913. St. Eloy Dalton, Nov., 1904.

First recorded a garden escape, near Dimboola, and now apparently naturalised. A freely seeding annual, apt to smother seedlings in cultivated land, but not poisonous, or specially injurious.

Cynosurus echinatus, L. "Rough Dog's-tail." (Gramineae).

Drouin, February, 1913. W. G. Anderson and H. J. Lindsay. This grass is a native of Europe, which appears occasionally on the shores of Great Britain. It appears to have definitely established itself as a naturalised alien, and to be growing plentifully in at least one district of Victoria. The plant is an annual, and less valuable as a pasture grass than the Crested Dog's tail (Cynosurus cristatus, L.), which is a perennial.

DIURIS MACULATA, Sm. "Leopard Orchid." (Orchideae).

Vereker Range, Wilson's Promontory. J. W. Audas. August, 1914.

Previously recorded for Sealer's Cove by F. v. Mueller.

Eragrostis curvula, Nees, var. valida, Stapf. "African Love Grass." (Gramineae).

Between Drouin and Warragul, Vict. W. G. Anderson, Feb., 1913.

This puzzling grass, which could for a long time not be referred to any described species of Eragrostis, is considered by Mrs. Agnes Chase to be the variety described by Stapf. It is a native of South Africa, and the ordinary forms are sometimes grown as fodder plants. When old, however, the stems are rather fibrous and the foliage scanty. It can hardly as yet be regarded as definitely naturalised.

ERECHTITES ATKINSONIAE, F. v. M. (Compositae).

Otukai, New Zealand. H. Carse, April, 1914.

Not previously recorded as growing wild in New Zealand. It is a native of New South Wales and Queensland.

ERECHTITES VALERIANAEFOLIA, D. C. (Compositae).

Otukai, New Zealand. H. Carse, April, 1914. A native of North America not previously recorded as introduced in New Zealand. This plant has been recorded as a naturalised alien in New South Wales, but has not yet made its appearance in Victoria.

Erigeron canadense, L. "Canadian Fleabane." (Compositae). Orbost. N. Wellington, 23/3/1914.

A widely spread naturalised alien first recorded as naturalised in 1908, and which has now reached the Orbost district.

GLADIOLUS GRANDIS, Thunberg. (Iridaceae). The Large-flowered Gladiolus.

A native of S. Africa, which was recorded as a spreading garden escape at Eltham in 1911, and has now appeared in thousands along a drain at Digger's Rest, on the Bendigo line. (C. French, Jr., Oct., 1914.)

The perfume is very strong, not unlike the scent of primroses. The plant does not seem to have any obnoxious qualities, but many of the Irideae are poisonous, and hence objectionable in pastures. It may now be regarded as an established naturalised alien.

Gomphrena canescens, R. Br. (Amarantaceae).

Herbert Bros.' Station, No. 2, Darwin. G. F. Hill, 28/5/13. This plant has reddish-purple heads and seems worthy of garden cultivation. The heads of the ordinary form are usually pale in colour.

Helipterum Guilfoylei, Ewart. Proc. Roy. Soc. Victoria, vol. xx. (n.s.), p. 82, 1907 = H. Zaccheus, S. le Moore. (Compositae).

Mr. Spencer le Moore writes that the achenes of this plant differ only from those of H. Zaccheus, S. le Moore, in being rich brown instead of dark slate colour and slightly shorter, and also finds the same peculiar mucilaginous layer in H. Zaccheus that was first described for H. Guilfoylei. The latter, therefore, becomes a synonym to the former.

Hydrocotyle medicaginoides Turcz. "Trefoil Pennywort." (Umbelliferae).

Miss J. E. Tilden, No. 811. Point Lonsdale, Nov., 1912. Not previously recorded for the south of Victoria.

Hyoscyamus albus, L. "White Henbane." (Solanaceae).

Williamstown, Victoria. C. French, junr., Oct., 1913.

Noted as a garden escape at Cashel nearly 20 years ago, and now definitely naturalised. The fruit is peculiar, opening by a lid. In ancient times this plant was regarded as a sacred plant, and sometimes smoked like tobacco as a preventative for toothache. It belongs to a poisonous genus, and contains a hypnotic and deleriant poison, hyoscyamin, but appears to be much less poisonous than the black Henbane, Hyoscyamus niger.

LINARIA ELATINE, L. "Hairy Toad Flax." (Scrophulariaceae).

Spreading in the Werribee district. C. French, junr., Oct., 1913.

LIPPIA NODIFLORA, Mich, var. sarmentosa. (Verbenaceae).

Williamstown. J. R. Tovey, Jan., 1914.

The plant grows in dense mats in the gutters and has evidently been introduced by foreign shipping. It is a common tropical weed, and has been used for lawns in Egypt, where grasses and ordinary lawn plants fail.

Morgania Glabra, R. Br. "Smooth Morgania." (Scrophulariaceae).

Myall, near Kerang. Miss Sheehan (H.B.W. No. 1465.)

Not previously recorded as Victorian. Baron von Mueller included all the species of Morgania with Stemodia viscosa as Stemodia Morgania, and hence the distribution of the species of Morgania now recognised is not easy to trace, but no previous specimens of it or records of it from Victorian localities can be found.

OLEARIA RAMULOSA, Benth., var. Intermedia, A. J. Ewart. New variety. (Compositae).

J. W. Audas. Grampians, 1914.

This form has the leaves of the type and the small heads of (Aster) Olearia microphylla, Vent., thus justifying Bentham's inclusion of this species as a variety of O. ramulosa. Baron von Mueller maintained both species in the Census, although Bentham noted the small flower heads of the Grampians form.

It is apparently a mountain variety, whereas other intermediate forms which come nearer to the variety *microphylla* are coastal plants (Portland, etc.).

Ononis spinosa, L. (Compositae).

Cobden, C. A. Ogilvie, 1913.

This weed, the "Spiny Restbarrow," a native of Europe, may now be considered to be definitely naturalised. Though practically useless as a fodder plant, it usually grows on the poorer soils, and since it is easily destroyed by cultivation, is hardly to be regarded as a serious weed.

ORTHOCERAS STRICTUM, R. Br. "Crow Orchid." (Orchidaceae).

Head of Barry's Creek, Wilson's Promontory. Messrs. Pitcher and Audas, Dec., 1912. Not previously recorded for the National Park.

Physalis viscosa, L. "Sticky Cape Gooseberry or Ground Cherry." (Solanaceae).

C. C. Brittlebank, March, 1913.

Growing in such abundance as to be almost a pest. The plant, which has already been recorded as an exotic, may now be regarded as definitely naturalised.

PINUS INSIGNIS, Doug. Monterey Pine." (Coniferae).

Between Beaconsfield and Emerald. J. W. Audas and E. E. Pescott, 1913. Upper Beaconsfield. J. R. Tovey, August, 1914.

This tree is now evidently establishing itself as a naturalised alien in many parts of Victoria, especially in the Beaconsfield and Emerald districts. It spreads from wind-borne seeds developed on planted trees.

Prasophyllum flavum, R. Br. "Yellow Leek Orchid." (Orchidaceae).

Mt. Baw Baw. C. French, junr., January, 1914.

A native of New South Wales and Queensland not previously recorded for Victoria.

PRASOPHYLLUM SUTTONI, Rogers and Rees. "Alpine Leek Orchid." (Orchidaceae).

Mt. Baw Baw. C. French, junr., January, 1914.

 Λ native of Victoria previously only recorded from the Buffalo Plateau.

Prostanthera denticulata, R. Br. "Rough Mint Bush." (Labiatae).

Hall's Gap, Grampians, Victoria. Miss J. E. Tilden, No. 962, Dec., 1912.

In Mr. Campbell's "Census of Grampian Plants" (Vict. Nat., Vol. XXVIII., p. 108, 1911) footnote, it is stated that this species does not occur in the Grampian Mountains. It was, however, recorded from the Grampians by Baron von Mueller, and still grows in fair abundance.

RANUNCULUS OPHIOGLOSSIFOLIUS, Vil. "Snake tongue Ranunculus." (Ranunculaceae).

Haddon, between Linton and Ballarat. H. B. Williamson, Dec., 1912.

This British plant is a native of West Europe and the Mediterranean regions. The plant is growing wild in fair abundance and may be regarded as definitely naturalised.

RESEDA LUTEA, L. "Cut-leaved Mignonette." (Resedaceae.)

Regnella, Sth. Australia. T. G. Osborn, Sept., 1913.

This plant is a native of Europe, especially in limestone districts. This is a new record for South Australia, but Professor

Osborn informs me he has since visited the locality and rooted out the plant. It will be interesting to see whether it reappears in the same or other localities.

Salix Caprea, L. "Sallow Willow." (Salicaceae).

Leongatha. J. M. Molloy, 15/8/14.

A native of Europe and Asia, growing usually near water. It is occasionally planted and has thence run wild, appearing to hold its own in the native scrub, particularly on river banks or near water.

THELYMITRA VENOSA, R. Br. "Veined Hood Orchid." (Orchidaceae).

Mt. Baw Baw. J. G. O'Donoghue and C. French, junr., Jan., 1914.

A native of New South Wales and South Australia, not previously recorded for Victoria.

TRITONIA LINEATA, Ker. "Pencilled Tritonia." (Irideae.)

Charlton, Nov., 1913.

Already recorded as a garden escape at Geelong, and apparently in process of becoming naturalised.

VICIA TETRASPERMA, Moench. "Slender Vetch." (Leguminosae).

Along the railway enclosure at Glen Iris, fairly abundant and away from cultivation paddocks. W. G. Anderson, Nov., 1912.

The plant has previously been recorded as an exotic and may now be regarded as definitely naturalised. It is a native of Europe and W. Asia, from Mediterranean to Arctic. The present form approaches towards the variety gracilis, but has the shorter pods of the type.

Zygophyllaceae). "Dwarf Twinleaf." (Zygophyllaceae).

Ouyen. H. B. Williamson, No. 1468, Sept., 1913.